

Mr. Ron Jochum  
Southern Indiana Gas and Electric Company  
20 Northwest Fourth Street  
Evansville, Indiana 47741

Re: 163-15853-00001  
2nd Significant Permit Modification to:  
Part 70 permit No.: T163-6899-00001

Dear Mr. Jochum:

Southern Indiana Gas and Electric Company was issued a Part 70 operating permit on February 10, 1999 for a stationary electric utility peaking station. A letter requesting changes to this permit was received on April 12, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changes in the NO<sub>x</sub> emission limit for turbine Unit #1 from 0.32 lbs/MMBtu to 0.545 lbs/MMBtu, in the gas usage limit for turbine Unit #1 from 1,519 million cubic feet (MMCF) per year to 892.5 MMCF per twelve (12) consecutive month period, and in the corresponding reporting requirements. This change will not increase the potential to emit of NO<sub>x</sub> from this unit.

All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of the revised permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
ERG/YC

cc: File - Vanderburgh County  
Vanderburgh County Health Department  
City of Evansville Environmental Protection Agency  
Southwest Regional Office  
Air Compliance Section Inspector - Scott Anlinger  
Compliance Data Section - Karen Nowak  
Administrative and Development - Sara Cloe

Technical Support and Modeling - Michele Boner



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## **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY and CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**Southern Indiana Gas and Electric Company  
Broadway Avenue Generating Station  
2600 Broadway Avenue  
Evansville, Indiana 47712**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T163-6899-00001	
Original issued by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: February 10, 1999 Expiration Date: February 10, 2004

First Significant Source Modification No.: 163-12400-00001, issued July 19, 2001  
First Significant Permit Modification No.: 163-14083-0001, issued July 19, 2001  
First Administrative Amendment No.: 163-14977-00001, issued November 2, 2001  
First Reopening No.: R 163-13509-00001, issued January 24, 2002

Second Significant Permit Modification No.: 163-15853-00001	Pages Affected: 5, 21, 28, 29, 40 and 41
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Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:
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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and City of Evansville EPA. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary electric utility peaking station.

Responsible Official:	Ron Jochum
Source Address:	2600 Broadway Avenue, Evansville, Indiana 47712
Mailing Address:	20 Northwest Fourth Street, Evansville, Indiana 47741
SIC Code:	4911
County Location:	Vanderburgh
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD rules

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired turbine, identified as Unit #1, with a heat input capacity of 770 million BTU per hour and a maximum generation capacity of 62 Megawatts, and exhausting to stack #1.

[Note: The maximum generation capacity varies with operating conditions, such as temperature and humidity. Therefore, this is an estimate of the maximum generation capacity.]

- (b) One (1) natural gas-fired turbine, identified as Unit #2, with a heat input capacity of 900 million BTU per hour (lower heating value (LHV) at 60EF) utilizing water injection for NO<sub>x</sub> emissions reduction, and exhausting to stack #2. Fuel oils no.1 and no. 2 will be used as alternative fuels. An inlet fogging system may be used to enhance power production.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).



## **SECTION B GENERAL CONDITIONS**

### **B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]**

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

### **B.2 Definitions [326 IAC 2-7-1]**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### **B.3 Permit Term [326 IAC 2-7-5(2)]**

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### **B.4 Enforceability [326 IAC 2-7-7(a)]**

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and City of Evansville EPA.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.
- (c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by City of Evansville EPA.

### **B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]**

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### **B.6 Severability [326 IAC 2-7-5(5)]**

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]**

This permit does not convey any property rights of any sort, or any exclusive privilege.

### **B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]**

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

- (b) The Permittee shall furnish to IDEM, OAQ, and City of Evansville EPA within a reasonable time, any information that IDEM, OAQ, and City of Evansville EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ, and City of Evansville EPA copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, and City of Evansville EPA along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

**B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]**

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- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]**

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- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, and City of Evansville EPA may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]**  
**[326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, and City of Evansville EPA upon request and shall be subject to review and approval by IDEM, OAQ, and City of Evansville EPA.

**B.13 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and City of Evansville EPA within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or  
IDEM Telephone Number: 317-233-5674 (ask for Compliance Section)

IDEM Facsimile Number: 317-233-5967  
Evansville EPA Telephone Number: 812-426-5597  
Evansville EPA Facsimile Number: 812-426-5399

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, and City of Evansville EPA may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and City of Evansville EPA by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
  - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
  - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.14 Permit Shield [326 IAC 2-7-15]**

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- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, and City of Evansville EPA shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, and City of Evansville EPA has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, and City of Evansville EPA has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]**

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Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

**B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
**[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, and City of Evansville EPA determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, and City of Evansville EPA to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, and City of Evansville EPA at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, and City of Evansville EPA may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.18 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and City of Evansville EPA and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250



Evansville, Indiana 47708

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM, OAQ, and City of Evansville EPA, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and City of Evansville EPA, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and City of Evansville EPA, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, and City of Evansville EPA fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]**  
**[326 IAC 2-7-12 (b)(2)]**

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]**

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The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

**B.22 Operational Flexibility [326 IAC 2-7-20]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250

Evansville, Indiana 47708

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and City of Evansville EPA in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

#### **B.23 Construction Permit Requirement [326 IAC 2]**

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

**B.24 Inspection and Entry [326 IAC 2-7-6(2)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, and City of Evansville EPA U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, and City of Evansville EPA or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, and City of Evansville EPA nor an authorized representative, may disclose the information unless and until IDEM, OAQ, and City of Evansville EPA makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, IDEM, OAQ, and City of Evansville EPA acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

**B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]**

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Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch and City of Evansville EPA, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAQ, and City of Evansville EPA shall reserve the right to issue a new permit.

**B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]**

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- (a) The Permittee shall pay annual fees to IDEM, OAQ, and City of Evansville EPA, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

**B.27 Enhanced New Source Review [326 IAC 2]**

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The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### Emission Limitations and Standards [326 IAC 2-7-5(1)]

**C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]**

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

**C.2 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]**

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4, 326 IAC 4-1-6, or MCE 3.30.18.214. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable. MCE 3.30.18.214 is a locally enforceable provision.

**C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]**

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2, 326 IAC 9-1-2 and MCE 3.30.18.214. MCE 3.30.18.214 is a locally enforceable provision.

**C.5 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions) or MCE 3.30.18.212. 326 IAC 6-4-2(4) is not federally enforceable. MCE 3.30.18.212 is a locally enforceable provision.

**C.6 Operation of Equipment [326 IAC 2-7-6(6)]**

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

**C.7 Stack Height [326 IAC 1-7]**

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

### **Testing Requirements [326 IAC 2-7-6(1)]**

#### **C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

#### **C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and



City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**C.11 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.12 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

---

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEM) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- (b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEM shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEM is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 326 IAC 10-4.

**C.13 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, and City of Evansville EPA, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, and City of Evansville EPA, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]**

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAQ, and City of Evansville EPA that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ, and City of Evansville EPA that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ, and City of Evansville EPA upon request and shall be subject to review and approval by IDEM, OAQ, and City of Evansville EPA. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or

- (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due.

**C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM and City of Evansville EPA may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]**

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, and City of Evansville EPA representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or City of Evansville EPA makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or City of Evansville EPA within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;

- (5) The results of such analyses; and
- (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

City of Evansville EPA  
101 N.W. Martin Luther King Jr. Blvd., Room 250  
Evansville, Indiana 47708
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and City of Evansville EPA on or before the date it is due.

- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Stratospheric Ozone Protection**

#### **C.22 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) natural gas-fired turbine, identified as Unit #1, with a heat input capacity of 770 million BTU per hour and a maximum generation capacity of 62 Megawatts, and exhausting to stack #1.

[Note: The maximum generation capacity varies with operating conditions, such as temperature and humidity. Therefore, this is an estimate of the maximum generation capacity.]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-1-16]

- (a) Pursuant to 326 IAC 6-1-16 (Vanderburgh County Particulate Limitations), the particulate matter emissions from Unit #1 shall not exceed 0.001 grains per dry standard cubic foot (gr/dscf).
- (b) Pursuant to 326 IAC 6-1-16 (Vanderburgh County Particulate Limitations), the particulate matter emissions from Unit #1 shall not exceed 1.74 tons per year.

#### D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The Permittee shall use only natural gas as fuel for Unit #1.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #1 shall not exceed 0.545 lb/MMBtu and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) Emissions of Carbon Monoxide (CO) from Unit #1 shall not exceed 0.084 lb/MMBtu and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to Unit #1 and is necessary to maintain the status of Unit # 2 as originally permitted, as a PSD minor mod to an existing PSD minor source.

### Compliance Determination Requirements

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee shall perform NO<sub>x</sub> stack testing for Unit 1 to demonstrate compliance with Condition D.1.2(b) not later than February 24, 2001. This testing was done on February 22, 2002 and was conducted utilizing methods as approved by the Commissioner, and in accordance with Section C - Performance Testing.

#### D.1.4 Continuous Emissions Monitoring [326 IAC 3-5]

In order to comply with Condition D.1.2 and pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous monitoring system shall be calibrated, maintained, and operated for measuring NO<sub>x</sub> and CO, which meets the performance specifications of 326 IAC 3-5-2.



**D.1.5 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]**

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The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring system for turbine Unit #1 on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.1.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be taken monthly and shall be sufficient to document compliance with Condition D.1.2.
- (1) Calendar dates covered in the compliance determination period;
  - (2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.
  - (3) The total NO<sub>x</sub> and CO emissions for each month; and
  - (4) The weight of NO<sub>x</sub> and CO emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.7 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**D.1.8 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)]**

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For NO<sub>x</sub> budget unit(s) that commenced operation prior to January 1, 2001, the NO<sub>x</sub> authorized account representative shall submit a complete NO<sub>x</sub> budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NO<sub>x</sub> authorized account representative to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (b) One (1) natural gas-fired turbine, identified as Unit #2, with a heat input capacity of 900 million BTU per hour (lower heating value (LHV) at 60EF) utilizing water injection for NO<sub>x</sub> emissions reduction, and exhausting to stack #2. Fuel oils no.1 and no. 2 will be used as alternative fuels. An inlet fogging system may be used to enhance power production.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Annual PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to emission limits established in Installation Permit No. 6078 issued by the Evansville Environmental Protection Agency on May 21, 1980, and a PSD Exemption letter issued by the State of Indiana Air Pollution Control Board on August 29, 1980:

- (a) The Permittee shall use only natural gas or No. 1 or No. 2 distillate oil as fuel for Unit #2.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall not exceed 0.13 lb/MMBtu when firing natural gas.
- (c) Emissions of sulfur dioxide (SO<sub>2</sub>) from Unit #2 shall not exceed 0.33 lb/MMBtu when firing distillate oil.
- (d) The input of natural gas to Unit #2 shall not exceed 3,605 million cubic feet (MMCF) per twelve (12) consecutive month period.
- (e) The input of distillate oil to Unit #2 shall not exceed 10,608 thousand gallons (kgal) per twelve (12) consecutive month period.
- (f) For every gallon of fuel oil that is used, natural gas usage shall be decreased by 252.4 cubic feet.

These limits are required to limit the potential to emit of nitrogen oxides (NO<sub>x</sub>) from Unit #2 to not more than 240 tons per 12 consecutive month period, and to limit the potential to emit of sulfur dioxide (SO<sub>2</sub>) from Unit #2 to not more than 225 tons per 12 consecutive month period, as required by the 1980 preconstruction approvals. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to the original installation of Unit #2.

#### D.2.2 Inlet Fogging PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The Unit 2 inlet fogging system shall only be used from the first of May to the end of September each year (i.e., the restricted period).
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #2 shall not exceed 0.13 lb/MMBtu when firing natural gas with the inlet fogging system in use.
- (c) Emissions of sulfur dioxide (SO<sub>2</sub>) from Unit #2 shall not exceed 0.33 lb/MMBtu when firing distillate oil with the inlet fogging system in use.

- (d) The input of natural gas to Unit 2 shall not exceed 914 million cubic feet (MMCF) per restricted period while the inlet fogging system is in use. This usage limit and the NO<sub>x</sub> emission limit in Condition D.2.2(b) limit the total NO<sub>x</sub> emissions with the fogging system in use to not more than 60.85 tons per restricted period.
- (e) The input of distillate oil to Unit 2 shall not exceed 1,888 thousand gallons (kgal) per restricted period while the inlet fogging system is in use. This usage limit and the SO<sub>2</sub> emission limit in Condition D.2.2(c) limit the total SO<sub>2</sub> emissions with the fogging system in use to not more than 40.05 tons per restricted period.
- (f) For every gallon of fuel oil that is used, natural gas usage shall be decreased by 252.4 cubic feet.

These limits are required to limit the potential to emit of this modification to not more than 39.5 tons of nitrogen oxides (NO<sub>x</sub>) and 39.5 tons sulfur dioxide (SO<sub>2</sub>) per 5 month restricted period. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to the installation and use of the Unit 2 inlet fogging system.

All fuel fired while the inlet fogging system is in use shall be included in the total fuel use for Unit #2 when demonstrating compliance with Condition D.2.1, to maintain the original permitting status of Unit #2 as a PSD minor modification to an existing PSD minor source.

#### D.2.3 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from Unit #2 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (gr/dscf).

#### D.2.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1]

Pursuant to Installation Permit No. 6078 issued by the Evansville Environmental Protection Agency on May 21, 1980, the Exemption from PSD Review letter issued by the Indiana Air Pollution Control Board on August 29, 1980, and 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations):

- (a) The sulfur dioxide (SO<sub>2</sub>) emissions from Unit #2 shall not exceed thirty-three hundredths (0.33) pound per MMBtu heat input while combusting distillate fuel oil, and
- (b) Unit 2 shall burn either No. 1 or No. 2 fuel oil with not more than 0.3% sulfur content, or natural gas.

#### D.2.5 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), emissions from Unit #2 shall be limited as follows:

- (a) Nitrogen oxides (NO<sub>x</sub>) emissions, as required by 40 CFR 60.332, shall not exceed:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F,$$

where STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

$F = \text{NO}_x \text{ emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.}$

Water injection shall be used to control  $\text{NO}_x$  emissions to the level required by equation stated above. The water injection system shall be operating at the proper injection ratio, as determined by the initial compliance testing, whenever the turbines are in operation except during the 14 minute start-up and 14 minute shutdown periods.

- (b) Sulfur dioxide ( $\text{SO}_2$ ) emissions, as required by 40 CFR 60.333, shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis, or the Permittee shall only use fuel with a sulfur content less than or equal to 0.8 percent by weight.

### Compliance Determination Requirements

#### D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

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- (a) Within sixty (60) days after initial start-up of the fogging system, the Permittee shall perform  $\text{NO}_x$  stack tests for Unit #2 while firing natural gas. If the Permittee wishes to use distillate oil as an alternate fuel, the Permittee shall also perform  $\text{NO}_x$  stack tests while firing distillate oil. Testing shall be conducted with the inlet fogging system in operation at the maximum water injection rate, and without the inlet fogging system in operation. Testing shall be conducted utilizing methods as approved by the Commissioner; and in accordance with Section C - Performance Testing.
- (b) IDEM may require additional compliance testing at any specific time when necessary to determine if the facility is in compliance. If additional testing is required by IDEM, compliance with the PM,  $\text{SO}_2$ , and  $\text{NO}_x$  limits specified in Conditions D.2.1, D.2.2, D.2.3 and D.2.4 shall be determined by performance tests conducted in accordance with Section C - Performance Testing.

#### D.2.7 Sulfur Dioxide Emissions and Sulfur Content

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The Permittee shall demonstrate that the sulfur dioxide ( $\text{SO}_2$ ) emissions do not exceed thirty-three hundredths (0.33) pound per MMBtu when firing distillate oil and that the sulfur content of the oil does not exceed 0.3%, utilizing one or more of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall document the sulfur content of the fuel oil by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance with the  $\text{SO}_2$  emission limit may also be determined by conducting a stack test for sulfur dioxide emissions from Unit #2, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) above. [326 IAC 7-2-1(b)].

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

**D.2.8 Continuous Monitoring System [326 IAC 12] [40 CFR 60, Subpart GG]**

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Pursuant to 40 CFR 60, Subpart GG (Stationary Gas Turbines), a continuous monitoring system for the measurement of fuel consumption and the ratio of water to fuel being fired in the turbine, shall be installed, calibrated, operated, and maintained.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

**D.2.9 Visible Emissions Notations**

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- (a) Visible emission notations of the Unit #2 stack exhaust shall be performed during normal daylight operations when combusting fuel oil at least once every 100 hours of fuel oil service. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

**D.2.10 Sulfur Content and Nitrogen Content [326 IAC 12] [40 CFR 60, Subpart GG]**

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Pursuant to 40 CFR 60.334(b), the Permittee shall monitor the nitrogen and sulfur content of the fuel being fired in Unit #2. The frequency of determination of these values shall be as follows:

- (a) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- (b) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with the monitoring requirements.

The Permittee shall determine the nitrogen and sulfur content of the fuel pursuant to the methods and procedures specified in 40 CFR 60.335. The sulfur content information obtained from this monitoring may be used to document compliance with the limit stated in Conditions D.2.1, D.2.2, and D.2.4.

**Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.2.11 Record Keeping Requirements**

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- (a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be taken monthly and shall be sufficient to document compliance with Conditions D.2.1 and D.2.2.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) The dates and time of operation of the inlet fogging system, and
  - (3) Actual natural gas and fuel oil usage since the last compliance determination period. Fuel usage records shall differentiate the quantity of fuel used with the inlet fogging system in operation.
- (b) To document compliance with Conditions D.2.4 and D.2.7, the Permittee shall maintain records in accordance with (1) through (6) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

  - (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and
  - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (c) To document compliance with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the Unit #2 stack exhaust when firing distillate oil.
- (d) To document compliance with Condition D.2.10, the Permittee shall maintain records of the nitrogen and sulfur content of all fuels combusted in Unit #2.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.2.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) A summary of the information to document compliance with Condition D.2.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after September 30 of each year.
- (c) The Permittee shall submit a semi-annual summary of the following:

(1) For nitrogen oxides:

- (A) One-hour periods during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Condition D.2.5(a); and
- (B) Any period during which the fuel bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test.

The summary shall contain the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

- (2) For sulfur dioxides, any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.3 percent by weight.
- (3) For ice fog and emergency fuel as required by 40 CFR 60.334(c)(3) and (4).

The reports in this section shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, in addition to the following address:

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

within thirty (30) days after the end of the six (6) month period being reported.

- (d) To document compliance with Condition D.2.9, the Permittee shall certify, on the form provided, that natural gas was fired in the turbine at all times during the report period. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during the report period. The form shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) \_\_\_\_\_

9 Report (specify) \_\_\_\_\_

9 Notification (specify) \_\_\_\_\_

9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH**

**P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674 Fax: 317-233-5967**

**CITY OF EVANSVILLE ENVIRONMENTAL PROTECTION AGENCY**

**101 N.W. Martin Luther King Jr., Room 250  
Evansville, Indiana 47708  
Phone: 812-426-5597 Fax: 812-426-5399**

**PART 70 OPERATING PERMIT  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)  
C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

- 9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)  
C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**PART 70 OPERATING PERMIT  
UNIT 2 NATURAL GAS FIRED CERTIFICATION**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Permit Mod No.: 163-14083-00001

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Report period

Beginning: \_\_\_\_\_

Ending: \_\_\_\_\_

Unit Affected: CT 2

Alternate Fuel

Days burning alternate fuel

From

To


I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Natural Gas Turbine Unit 1  
Parameter: NOx emissions  
Limit: Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone:

---

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Facility: Natural Gas Turbine Unit 1  
Parameter: CO emissions  
Limit: Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report: Unit #2 Natural Gas**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Permit Mod No.: 163-14083-00001  
Facility: Natural Gas/Fuel Oil Turbine (Unit #2)  
Parameter: PSD Limit (SO<sub>2</sub>, NO<sub>x</sub>) (Natural Gas)  
Limit: 3605 million cubic feet of natural gas used per 12 consecutive month period

YEAR: \_\_\_\_\_

Month	Natural Gas Usage This Month (MMCF)	Natural Gas Usage Previous 11 Months (MMCF)	Total Natural Gas Usage for 12 Month Period (MMCF)	Usage Limit (MMCF)
				3605*
				3605*
				3605*

\* For every gallon of fuel oil used, natural gas usage shall be decreased by 252.4 cubic feet.

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_



Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report: Unit #2 Distillate Oil**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Permit Mod No.: 163-14083-00001  
Facility: Natural Gas/Fuel Oil Turbine (Unit #2)  
Parameter: PSD Limit (PM, SO<sub>2</sub>, NO<sub>x</sub>) (Distillate Oil)  
Limits: 0.3% sulfur content, by weight  
0.33 lb/MMBtu SO<sub>2</sub>  
10,608 thousand gallons of distillate fuel oil used per 12 consecutive month period

YEAR: \_\_\_\_\_

Month	Distillate Oil Usage This Month (kgals)	Distillate Oil Usage Previous 11 Months (kgals)	Total Distillate Oil Usage for 12 Month Period (kgals)	Usage Limit (kgals)
				10,608
				10,608
				10,608

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Natural Gas**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T 163-6899-00001  
Permit Mod No.: T 163-14083-00001  
Facility: Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit 2)  
Parameter: PSD Minor Modification Limit (SO<sub>2</sub>, NO<sub>x</sub>) (Natural Gas)  
Limit: 914 million cubic feet of natural gas used per 5 consecutive month period

YEAR: \_\_\_\_\_

Month	May	June	July	August	September	Season Total	Season Limit
Natural Gas Usage This Month (MMCF)							914 * MMCF
Equivalent NO <sub>x</sub> Emissions (Tons)							60.85 tons NO <sub>x</sub>

\* For every gallon of fuel oil used, natural gas usage shall be decreased by 252.4 cubic feet.

- 9 No deviation occurred in this quarter.  
9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attach a signed certification to complete this report.**

**This form is due within thirty (30) days after September 30.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Seasonal Inlet Fogging Report: Distillate Oil**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Permit Mod No.: 163-14083-00001  
Facility: Natural Gas/Fuel Oil Turbine with Inlet Fogging in Use (Unit #2)  
Parameter: PSD Minor Modification Limit (SO<sub>2</sub>, NO<sub>x</sub>) (Distillate Oil)  
Limits: No. 1 or No. 2 fuel oil with not more than 0.3% sulfur content, by weight  
1888 kgals of distillate fuel oil used per 5 consecutive month period

YEAR: \_\_\_\_\_

Month	May	June	July	August	September	Season Total	Season Limit
Distillate Oil Usage This Month (MMCF)							1888 * kgals
Equivalent SO <sub>2</sub> Emissions (Tons)							40.05 tons SO <sub>2</sub>

\* For every gallon of fuel oil used, natural gas usage shall be decreased by 252.4 cubic feet.

9 No deviation occurred in this period.

9 Deviation/s occurred in this period.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**This report is due within thirty (30) days after September 30.**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**PART 70 OPERATING PERMIT  
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## **Indiana Department of Environmental Management Office of Air Quality**

### **Addendum to the Technical Support Document for a Part 70 Significant Permit Modification**

Source Name:	Southern Indiana Gas and Electric Company Broadway Avenue Generating Station
Source Location:	2600 Broadway Avenue, Evansville, Indiana 47712
County:	Vanderburgh
SIC Code:	4911
Operation Permit No.:	T163-6899-00001
Operation Permit Issuance Date:	February 10, 1999
Significant Permit Modification No.:	163-15853-00001
Permit Reviewer:	ERG/YC

On August 13, 2002, the Office of Air Quality (OAQ) had a notice published in the Evansville Courier, Evansville, Indiana, stating that Southern Indiana Gas and Electric Company had applied for a Part 70 Significant Permit Modification for revising the NO<sub>x</sub> emission limit for existing permitted turbine Unit #1. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 3, 2002, Mr. Stephen A. Loeschner [referred as the commenter] submitted comments on the proposed Significant Permit Modification. Mr. Allen Rose with Southern Indiana Gas and Electric Company [referred as the source] submitted comments on the proposed Significant Permit Modification on January 13, 2003. The summary of the comments is as follows:

#### **Comment 1:**

The commenter stated that, according to the "Heat Input Rate" definition in 40 CFR 72.2, the heat input rate of the turbines equals the Gross Calorific Value (GCV) divided by fuel feed rate. The commenter contends that the maximum heat input rate descriptions in Conditions A.2 and section D for the turbines are based on the Lower Heating Value (LHV), instead of GCV. Therefore, the maximum heat input rate for the turbines (Unit 1 and Unit 2) should be revised. The commenter also stated that the hierarchy of Condition D.2.(b) is incorrect.

#### **Response to Comment 1:**

The stated heat input capacities of Units 1 and 2 are 770 million BTU per hour (MMBtu/hr) and 900 MMBtu/hr, respectively. SIGECO requested in source and permit modifications in 2001 (SSM #163-12400-00001 and SPM 163-14083-00001) to have the Unit 2 facility description amended to state that this capacity was based on the Lower Heating Value of natural gas, and to have the emissions calculated at the Higher Heating Value capacity which is 1000 MMBtu/hr for Unit 2 when combusting natural gas and 1087 MMBtu/hr when combusting distillate oil. SIGECO explained that turbine vendors reportedly state the capacity based on the lower heating value, meaning that the latent heat of condensation associated with the moisture in the exhaust gas is ignored.



Vendors use this value because at the exhaust temperatures of simple cycle turbines the latent heat cannot be extracted and converted to power.

The supporting documentation for the 1980 permit for Unit 2 includes a page titled "Attachment #1: Southern Indiana Gas & Electric Estimated Emissions Data for Unit 2". The page shows a peak output of 81440 KW and a peak heat rate of 11000 Btu/KWH; **LHV**. When converted to MMBtu/hr this gives a peak heat input of 896 MMBtu/hr at the Lower Heating Value, approximately the same as the stated heat input capacity of 900 MMBtu/hr. Therefore, it was determined that the previously stated 900 MMBtu/hr is the capacity at the lower heating value, and the Unit 2 description was amended as requested.

No corresponding change was made to the Unit 1 description. For air permitting purposes the heat input capacity at the higher heating value is more commonly used, including the AP-42 emission factors used in calculating the potential emissions and fuel limitations for the turbines at the Broadway Avenue Station. There is no indication in the OAQ files that the originally stated capacity for Unit 1 has previously been considered to be a Lower Heating Value. In a letter dated November 5, 1998, Angila Retherford, an attorney for SIGECO, used the AP-42 PM emission factor current at that time and the stated heat input capacity of 770 MMBtu/hr for Unit 1 in calculating a recommended annual PM emission limit for Unit 1. Therefore, it was determined that the stated heat input capacity for Unit 1 is based on the higher heating value.

Because the maximum heat input is used only as a description for the turbines and these are set by the vendor and placed on the name plate, no change has been made to the referenced maximum heat input for Unit 2. Also, the heat input capacity does not effect the calculation of any of the fuel usage limits established for either unit. The fuel limits were derived using the AP-42 emission factors, in lb/MMBtu, and the heat content of the natural gas (1024 btu/scf) and distillate oil (140 MMBtu/kgal) as reported by SIGECO.

It is unclear what the comment is referring to when discussing the hierarchy of D.2(b). If the commenter is referring to the fact that there is only one paragraph, but it is labeled "b", the paragraph is labeled as "b" in order to match the reference in A.2. For permits with long lists of equipment, keeping the letter identifiers the same in A.2 and the D sections simplifies review.

**Comment 2:**

The commenter requested that the Maximum Megawatts (MW) generating capacity be specified for each of the turbines (Units 1 and Unit 2) in Conditions A.2 and Section D.

**Comment 3:**

A subsequent comment from the source stated that they feel uncomfortable with the listing of a megawatt rating for a gas turbine. The generation capacity is variable with the temperature and humidity, making this rating irrelevant and potentially misleading. The heat input capacity is much more descriptive.

**Response to Comment 2 and Comment 3:**

Turbine Unit 1 is a generator with a capacity of 62 MW and Turbine Unit 2 has a capacity of 80 MW. This information has been added to the permit for Unit 1. The description of Unit 2 has not been revised in this permit modification because only Unit 1 is the subject of this modification. Unit

2 will be addressed in a later permit modification (SPM163-16220-00001). A note has also been added explaining that the megawatt rating varies with operating conditions. Therefore, the unit description in Section A.2 and D.1 has been revised as follow:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

---

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired turbine, identified as Unit #1, with a heat input capacity of 770 million BTU per hour **and a maximum generation capacity of 62 Megawatts**, and exhausting to stack #1.

**[Note: The maximum generation capacity varies with operating conditions, such as temperature and humidity. Therefore, this is an estimate of the maximum generation capacity.]**

**SECTION D.1 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]**

- (a) One (1) natural gas-fired turbine, identified as Unit #1, with a heat input capacity of 770 million BTU per hour **and a maximum generation capacity of 62 Megawatts**, and exhausting to stack #1.

**[Note: The maximum generation capacity varies with operating conditions, such as temperature and humidity. Therefore, this is an estimate of the maximum generation capacity.]**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Comment 4:**

The commenter requested that the definition of "Natural Gas" in 40 CFR 72.2 be referred to in Conditions D.1.1 and D.2.3. The commenter also stated that the gas volume unit of "cubic feet" (cf) referred to in these permit conditions should be revised to "40 CFR 72.3 scf".

**Response to Comment 4:**

A Continuous Emissions Monitoring (CEM) system is being required for Turbine Unit 1, and therefore the natural gas fuel usage limit has been removed. Consequently, the gas volume is no longer referred to in the revised permit. No change was made as a result of this comment.

**Comment 5:**

The commenter stated that, according to the natural gas definition in 40 CFR 72.2, the heating value of natural gas could range from 950 Btu/scf to 1,100 Btu/scf.

Based on using the natural gas with a heating value of 1,100 Btu/scf, the potential to emit NO<sub>x</sub> from turbine Unit #1 is:

$$0.545 \text{ lbs/MMBtu} \times 892.35 \text{ MMscf/yr} \times 1,100 \text{ Btu/scf} \times 1 \text{ ton/2000 lbs} = 267.5 \text{ tons/yr}$$

Based on using the natural gas with a heating value of 950 Btu/scf, the potential to emit NO<sub>x</sub> from turbine Unit #1 is:

$$0.545 \text{ lbs/MMBtu} \times 892.35 \text{ MMscf/yr} \times 950 \text{ Btu/scf} \times 1 \text{ ton/2000 lbs} = 231.0 \text{ tons/yr}$$

The commenter maintained that, in order to ensure compliance with the NO<sub>x</sub> emission limit of 250 tons/yr, the heating value of the natural gas combusted in turbines Unit #1 and #2 should be included as a limit in a permit condition. Currently, only the annual natural gas usage limit (MMCF/yr) and the NO<sub>x</sub> emission limit (lbs/MMBtu) are contained as the permit conditions.

#### **Response to Comment 5:**

Because a Continuous Emissions Monitoring (CEM) system is required for turbine Unit 1 and the natural gas fuel usage limit has been removed, the heating value that was used to calculate the fuel limit for Unit 1 is moot. This issue will be considered and addressed for Unit 2 during the development of SPM163-16220-00001.

#### **Comment 6:**

The commenter maintained that the conditions D.1.2(b) and D.2.1(b) as "enforced" by D.1.3 and D.2.6 respectively are not federally enforceable. The commenter stated that, in order to ensure compliance with the NO<sub>x</sub> and CO emission limits, Continuous Emission Monitoring (CEM) should be required for turbines Unit 1 also. CEMS is required in permit #065-10469-00032 for the 132 MW turbine at Cinergy Cadiz. The commenter stated that SIGECO, a larger source, should have the same CEM requirements for turbine Units 1. The commenter asked what the dates and the results of all the NO<sub>x</sub> stack testing for the turbines from January 1992 through March 2002.

#### **Comment 7:**

A subsequent comment from the source questioned why Turbine Unit 1 is being required to monitor the CO emissions. The source stated that this requirement is very costly to comply with for no more real effect than it will have.

#### **Response to Comment 6 and Comment 7:**

The three (3) gas turbines permitted in permit #065-10469-00032, issued July 15, 1999, for Cinergy Cadiz were constructed after 1999 and are subject to the New Source Performance Standards (NSPS) for Stationary Gas Turbines (40 CFR 60, Subpart GG), which require that a CEMS be installed. Turbine Unit 1 at this source was constructed before 1977 and is not subject to the requirements of 40 CFR 60, Subpart GG.

The unlimited potential to emit CO from turbine Unit 1 is greater than 250 tons/yr. In the original permit the fuel limit effectively limited the CO emissions to less than 250 tons/yr, but there was no specific CO limit. Therefore, a limit for turbine Unit 1 has been added that limits the CO emissions to less than 250 tons/yr. In order to demonstrate compliance with the emission limit for CO and the emission limit for NO<sub>x</sub>, OAQ is requiring the CO and NO<sub>x</sub> CEMs to be installed. The CEMs are being required under the authority of 326 IAC 3-5-1(d)(1) and 326 IAC 2-7-6.

Turbine Unit 1 is also subject to the requirements of 326 IAC 10-4 as it has a capacity greater than 25 MW and commenced operation before January 1, 1997. Therefore, the Permittee is already required to install the appropriate monitoring systems and complete all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. This permit requires the CO and NO<sub>x</sub> CEMs to be installed within 90 days of issuance of this permit.

Because CEMs are required, a fuel usage limit does not provide any additional compliance assurance. Therefore, the fuel use limit for Unit 1 has been removed.

A stack test for Turbine Unit 1 was conducted on February 22, 2002 during the time period of January 1992 to March 2002. The result showed that the NO<sub>x</sub> emission rate from this unit was 0.482 lbs/MMBtu, which demonstrates compliance with the 0.545 lbs/MMBtu limit.

These issues will be considered and addressed for Unit 2 during the development of SPM163-16220-00001.

The following changes to the permit have been made as a result of these comments. Some changes are shown that will be discussed in subsequent responses.

#### D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The Permittee shall use only natural gas as fuel for Unit #1.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #1 shall not exceed 0.545 lb/MMBtu **and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**
- (c) ~~The input of natural gas to the Unit #1 turbine shall not exceed 892.35 million standard cubic feet (MMSCF) per twelve (12) consecutive month period with compliance determined at the end of each month.~~ **Emissions of Carbon Monoxide (CO) from Unit #1 shall not exceed 0.084 lb/MMBtu and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**

~~These limits are required to limit the potential to emit of nitrogen oxides (NO<sub>x</sub>) from Unit 1 to less than 250 tons per 12 consecutive month period.~~ Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to Unit #1 and is necessary to maintain the status of Unit # 2 as originally permitted, as a PSD minor mod to an existing PSD minor source.

#### D.1.4 Continuous Emissions Monitoring [326 IAC 3-5]

**In order to comply with Condition D.1.2 and pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous monitoring system shall be calibrated, maintained, and operated for measuring NO<sub>x</sub> and CO, which meets the performance specifications of 326 IAC 3-5-2.**

#### D.1.56 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2(e), the Permittee shall maintain records in accordance with (1) ~~and through (24)~~ below. Records shall be taken monthly and shall be sufficient to document compliance with Condition D.1.2(e).

- (1) Calendar dates covered in the compliance determination period;

\_\_\_\_ (2) ~~Actual natural gas usage since the last compliance determination period.~~

(2) All continuous emissions monitoring data, pursuant to 326 IAC 3-5.

(3) The total NO<sub>x</sub> and CO emissions for each month; and

(4) The weight of NO<sub>x</sub> and CO emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report: Unit #1**

Source Name: \_\_\_\_\_ Southern Indiana Gas and Electric Company  
Source Address: \_\_\_\_\_ 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: \_\_\_\_\_ 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: \_\_\_\_\_ T163-6899-00001  
Permit Mod No.: \_\_\_\_\_ 163-14083-00001  
Facility: \_\_\_\_\_ Natural Gas Turbine (Unit 1)  
Parameter: \_\_\_\_\_ PSD Limit (NO<sub>x</sub>)  
Limit: \_\_\_\_\_ 892.35 million cubic feet of natural gas used per 12 consecutive month period

\_\_\_\_ YEAR: \_\_\_\_\_

Month	Natural Gas Usage This Month (MMGF)	Natural Gas Usage Previous 11 Months (MMGF)	Total Natural Gas Usage for 12 Month Period (MMGF)	Usage Limit (MMGF)
				892.35
				892.35
				892.35

\_\_\_\_ 9 No deviation occurred in this quarter.

\_\_\_\_ 9 Deviation/s occurred in this quarter.

\_\_\_\_ Deviation has been reported on: \_\_\_\_\_

\_\_\_\_\_  
Submitted by: \_\_\_\_\_

\_\_\_\_\_  
Title / Position: \_\_\_\_\_

\_\_\_\_\_  
Signature: \_\_\_\_\_

\_\_\_\_\_  
Date: \_\_\_\_\_

\_\_\_\_\_  
Phone: \_\_\_\_\_

\_\_\_\_\_  
Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

**Source Name:** Southern Indiana Gas and Electric Company  
**Source Address:** 2600 Broadway Avenue, Evansville, Indiana 47712  
**Mailing Address:** 20 Northwest Fourth Street, Evansville, Indiana 47741  
**Part 70 Permit No.:** T163-6899-00001  
**Facility:** Natural Gas Turbine Unit 1  
**Parameter:** NOx emissions  
**Limit:** Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Data Section  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report**

**Source Name:** Southern Indiana Gas and Electric Company  
**Source Address:** 2600 Broadway Avenue, Evansville, Indiana 47712  
**Mailing Address:** 20 Northwest Fourth Street, Evansville, Indiana 47741  
**Part 70 Permit No.:** T163-6899-00001  
**Facility:** Natural Gas Turbine Unit 1  
**Parameter:** CO emissions  
**Limit:** Less than 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

**YEAR:** \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

**Submitted by:** \_\_\_\_\_  
**Title / Position:** \_\_\_\_\_  
**Signature:** \_\_\_\_\_  
**Date:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_



**Attach a signed certification to complete this report.**

**Comment 8:**

The commenter maintained that, in order to limit the CO emissions to less than 250 tons/yr for each unit, a CO emission limit should be required for the turbines (Units 1 and Unit #2). Currently, there are no CO emission limits for both units.

**Response to Comment 6 and Comment 8:**

With the fuel limit, CO emissions were much less than 250 tons per year. However, the potential to emit CO from Turbine Unit 1 is greater than 250 tons per year before control. With the removal of the fuel use limit, a specific CO limit has been added to the permit for Unit 1.

**D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

- 
- (c) ~~The input of natural gas to the Unit #1 turbine shall not exceed 892.35 million standard cubic feet (MMSCF) per twelve (12) consecutive month period with compliance determined at the end of each month.~~ **Emissions of Carbon Monoxide (CO) from Unit #1 shall not exceed 0.084 lb/MMBtu and 250 tons per twelve (12) consecutive month period with compliance determined at the end of each month.**

**Comment 9:**

The commenter maintained that CEM should be required on the turbine Unit 1 to ensure compliance with NO<sub>x</sub> and CO emission limits in this permit. The commenter stated that a CEM system should be installed promptly (within 120 days).

**Response to Comment 9:**

This comment has been addressed in previous responses. CEMs have been added for NO<sub>x</sub> and CO for Unit 1.

**Comment 10:**

The commenter maintained that Condition D.2.3 was not federally enforceable by requiring testing only at the request of IDEM. The commenter contended that the equipment would degrade with time and the PM emissions would increase. The commenter stated that nothing less than annual PM testing while burning oil would show compliance with this condition. The commenter also contended that the permit lacked enforceability on a more or less continuous basis. The commenter asked what are the dates and results of all PM stack tests for the turbines from January 1992 through March 2002.

**Response to Comment 10:**

Condition D.2.3 limits particulate emissions (PM) from turbine Unit #2 to less than 0.03 gr/dscf. Based on the PM emission factors in AP-42, PM emissions from the natural gas and fuel oil combustion turbines are less than the limit of 0.03 gr/dscf. When firing fuel oil, the source is required to perform visible emission notations to ensure compliance with this PM limit. According to IDEM's policy, there are no visible emission notation requirements for natural gas combustion units. Therefore, no changes were made to the permit as a result of this comment.

No stack testing has been done for the PM emissions during the time period of January 1992 to March 2002.

**Comment 11:**

The commenter maintained that Condition D.1.1 is not federally enforceable and there are no compliance determination or monitoring conditions associated with these emission limits in the permit.

**Response to Comment 11:**

Condition D.1.1 limits the particulate emissions (PM) from turbine Unit 1 to less than 0.001 gr/dscf and 1.74 tons/yr. Based on the PM emission factors in AP-42 and the rated capacity, the potential to emit PM from turbine Unit 1 is 1.48 tons/yr when firing natural gas. Since only natural gas can be combusted in turbine Unit 1, this unit is in compliance with the PM limits contained in Condition D.1.1. According to IDEM's policy, there are no visible emission notation requirements for natural gas combustion units. Therefore, no changes were made to the permit as a result of this comment.

**Comment 12:**

The commenter maintained that, to ensure absolute compliance with the emission cap of 250 tons/yr, the measurement error (for instance, the measurement error in air flow rate and air pollutant concentrations) should be considered when establishing the permit conditions. The commenter requested that the NO<sub>x</sub> and CO emission limits in this permit be adjusted based on reasonable assumptions of measurement errors.

**Response to Comment 12:**

The IDEM, OAQ has reviewed the possibility of errors in measurements during stack test in the past. During the evolution of stack test protocol it was shown that as the measure of error is both positive and negative in some percentage (for example,  $\pm 3\%$  of the NO<sub>x</sub> mass concentration), it can work both for and against the project applicant. Therefore, there is the same chance of the applicant emitting more as there is chance for emitting less than what is being recorded.

**Comment 13:**

The commenter requested that if the requested changes in comments 1, 3, 4, 8, and 9 are not made in this modification that the U.S. Environmental Protection Agency (US EPA), IDEM, and the City of Evansville Environmental Protection Agency (EEPA) classify these issues as a 40 CFR 70.7(f)(1)(iii), IC 13-15-7-2(3)(A), "material mistake" and reopen the permit promptly for amendment.

**Response to Comment 13:**

All comments have been addressed in this modification for Unit 1. These issues will be considered and addressed for Unit 2 during the development of SPM163-16220-00001.

**Comment 14:**

The source requested to submit the fuel usage report for the first quarterly report of 2003 because the CEM will not be delivered and installed until the end of the first quarter of 2003. Therefore, there

will be no actual emission data available from the CEM records.

**Response to Comment 14:**

IDEM, OAQ has evaluated this request and agreed that the source can submit the fuel usage record for the first quarterly report of 2003. The actual emission data from the CEM for turbine Unit 1 will not be available because the CEMs will not be installed yet. The second quarterly report of 2003 should contain the actual emissions data from the CEMs.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. Pursuant to 326 IAC 10-4-2(16) (NO<sub>x</sub> Budget Trading Program), both turbines Unit 1 and Unit 2 are considered "electricity generating units (EGU)" because they commenced operation before January 1, 1997 and served a generator during 1995 or 1996 that had a nameplate capacity greater than twenty-five (25) megawatts that produced electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a NO<sub>x</sub> budget unit. Because this source meets the criteria of having one (1) or more NO<sub>x</sub> budget units, it is a NO<sub>x</sub> budget source. Therefore, the Permittee is subject to the requirements of 326 IAC 10-4 (NO<sub>x</sub> Budget Trading Program).

Pursuant to 326 IAC 10-4-12(c), the Permittee shall install the appropriate monitoring systems and complete all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003. Therefore, the following conditions have been added to Sections C and D.1 of the permit. The conditions in Sections C and D have been renumbered due to these changes.

**C.12 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) **The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEM) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.**
- (b) **In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.**
- (c) **Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEM shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEM is back in operation.**
- (d) **Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 326 IAC 10-4.**

**D.1.5 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40 CFR 75]**

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**The Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring system for turbine Unit #1 on or before May 1,**

**2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.**

**D.1.8 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)]**

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**For NO<sub>x</sub> budget unit(s) that commenced operation prior to January 1, 2001, the NO<sub>x</sub> authorized account representative shall submit a complete NO<sub>x</sub> budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NO<sub>x</sub> authorized account representative to:**

**Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015**

2. In reviewing the TSD and the permit after public notice, IDEM, OAQ has decided that it is important to further clarify the acid rain program (40 CFR 72) applicability of the combustion turbines at this source:

Neither of turbines Unit 1 and Unit 2 at this source are subject to Title IV requirements (40 CFR 72)(Acid Rain Program) because they are both simple cycle combustion turbines that commenced operation before November 15, 1990, and have not added or used auxiliary firing after that date (40 CFR 72.6(b)(1)).

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Evansville Environmental Protection Agency**

**Technical Support Document (TSD) for a  
Part 70 Significant Permit Modification**

**Source Background and Description**

Source Name:	Southern Indiana Gas and Electric Company Broadway Avenue Generating Station
Source Location:	2600 Broadway Avenue, Evansville, Indiana 47712
County:	Vanderburgh
SIC Code:	4911
Operation Permit No.:	T163-6899-00001
Operation Permit Issuance Date:	February 10, 1999
Significant Permit Modification No.:	163-15853-00001
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Southern Indiana Gas and Electric Company, Broadway Avenue Generating Station relating to the operation of the natural gas-fired turbine Unit #1.

**Explanation of Modification**

In the First Permit Modification (#163-14083-00001, issued on July 19, 2001) to the Title V Permit 163-6899-00001, the NO<sub>x</sub> emissions limits for the natural gas-fired turbine Unit #1 were revised to:

- (a) Less than 0.32 pounds of NO<sub>x</sub> per million Btu, which was based on the NO<sub>x</sub> emission factors in AP-42; and
- (b) Less than 1,519 million cubic feet (MMCF) per year of gas input.

These conditions are equivalent to 243 tons per year of NO<sub>x</sub> emissions and were necessary to limit the NO<sub>x</sub> emissions from turbine Unit #1 to less than 250 tons per year in order to make PSD not applicable. The Permittee was required to perform NO<sub>x</sub> stack testings on Unit #1 no later than February 24, 2002 to demonstrate compliance with the NO<sub>x</sub> emission limit above.

On February 22, 2002, the Permittee performed stack tests on turbine Unit #1 and the results showed that the actual NO<sub>x</sub> emission rates were higher than the NO<sub>x</sub> emission limits established in permit #163-14083-00001, issued on July 19, 2001.

Therefore, on April 12, 2002, Southern Indiana Gas and Electric Company submitted an application to revise the NO<sub>x</sub> emissions limits for the turbine Unit#1 to as follows:

- (a) Less than 0.545 pounds of NO<sub>x</sub> per million Btu; and
- (b) Less than 892.35 MMCF per twelve (12) consecutive month period of gas input.

Based on normal firing situation, the proposed new limits are still equivalent to 243 tons per year of NO<sub>x</sub> emissions (892.35 MMCF/yr x 1,000 Btu/CF x 0.545 lbs/MMBtu x 1 tons/2000 lbs = 243 tons/yr), which is the same as the potential to emit of NO<sub>x</sub> for turbine Unit #1 in the current TV permit.

### Justification for the Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(d)(1) as this is a modification to change Part 70 permit conditions for which there is no corresponding underlying applicable requirement and that the Permittee has assumed to make PSD review not applicable. Therefore, pursuant to 326 IAC 2-7-12(b)(D), this modification may not be processed as a minor permit modification.

### Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 12, 2002.

### Proposed Changes

#### D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

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- (a) The Permittee shall use only natural gas as fuel for Unit #1.
- (b) Emissions of nitrogen oxides (NO<sub>x</sub>) from Unit #1 shall not exceed **0.545**~~0.32~~ lb/MMBtu.
- (c) The input of natural gas to the Unit #1 turbine shall not exceed **892.35**~~1,519~~ million cubic feet (MMCF) per **year-twelve (12) consecutive month period**.

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

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The Permittee shall perform NO<sub>x</sub> stack testing for Unit 1 to demonstrate compliance with Condition D.1.2(b) not later than February 24, 2001. **This testing was done on February 22, 2002 and was Testing will be**conducted utilizing methods as approved by the Commissioner, and in accordance with Section C - Performance Testing.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
CITY OF EVANSVILLE  
ENVIRONMENTAL PROTECTION AGENCY**

**Part 70 Quarterly Report: Unit #1**

Source Name: Southern Indiana Gas and Electric Company  
Source Address: 2600 Broadway Avenue, Evansville, Indiana 47712  
Mailing Address: 20 Northwest Fourth Street, Evansville, Indiana 47741  
Part 70 Permit No.: T163-6899-00001  
Permit Mod No.: 163-14083-00001  
Facility: Natural Gas Turbine (Unit 1)  
Parameter: PSD Limit (NO<sub>x</sub>)  
Limit: ~~892.35~~ **1519** million cubic feet of natural gas used per 12 consecutive month period

YEAR: \_\_\_\_\_

Month	Natural Gas Usage This Month (MMCF)	Natural Gas Usage Previous 11 Months (MMCF)	Total Natural Gas Usage for 12 Month Period (MMCF)	Usage Limit (MMCF)
				<del>1519</del> <b>892.35</b>
				<del>1519</del> <b>892.15</b>
				<del>1519</del> <b>892.15</b>

**9** No deviation occurred in this quarter.

**9** Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.



## **Conclusion**

This permit modification shall be subject to the conditions of the attached Part 70 Permit Modification No. 163-15853-00001.